

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P200301630WO	<b>FOR FURTHER ACTION</b>		See Form PCT/PEA/416
International application No. PCT/DK2004/000787	International filing date ( <i>day/month/year</i> ) 12.11.2004	Priority date ( <i>day/month/year</i> ) 14.11.2003	
International Patent Classification (IPC) or national classification and IPC INV. B29C45/26 A61M25/00			
Applicant UNOMEDICAL A/S			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a.  (*sent to the applicant and to the International Bureau*) a total of 4 sheets, as follows:
    - sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b.  (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:
  - Box No. I Basis of the report
  - Box No. II Priority
  - Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - Box No. IV Lack of unity of invention
  - Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - Box No. VI Certain documents cited
  - Box No. VII Certain defects in the international application
  - Box No. VIII Certain observations on the international application

Date of submission of the demand 23.06.2005	Date of completion of this report 08.03.2006
Name and mailing address of the international preliminary examining authority:   European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized officer  Zattoni, F Telephone No. +31 70 340-3202



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INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY

International application No.  
PCT/DK2004/000787

IAP20 Rec'd PCT/PTO 11 MAY 2006

**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3 and 23.1(b))
    - publication of the international application (under Rule 12.4)
    - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

**Description, Pages**

1-13 as originally filed

**Claims, Numbers**

1-22 received on 23.06.2005 with letter of 23.06.2005

**Drawings, Sheets**

1/3-3/3 as originally filed

- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3.  The amendments have resulted in the cancellation of:
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/DK2004/000787

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes:	Claims	1-22
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-22
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-22
	No:	Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/DK2004/000787

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following document:

D1: WO-A-9000960

- 2.1 Document D1, cf. figure 2, discloses a method for one-piece injection moulding of a soft needle catheter to be inserted by an introducer needle, which cathether comprises a hub (12,13) and a tube-shaped flexible part (11) comprising the steps of feeding a molten polymer into a mould comprising a core defining a cavity composed of a hub cavity and a tube shaped cavity, said core having a cone-shaped part (defining elements 12 and 13 in D1) and a cylindrical part (defining element 11 in D1) forming the interior of the catheter; removing the core from the catheter when the polymer has been cured; removing the catheter from the mould.

Claim 1 differs therefrom in that a core is used wherein the cone-shaped part of the core forms at least a part of the interior of the hub and extends into the tube-shaped cavity so as to form an interior of the tube-shaped flexible part being at least partially cone-shaped.

The subject-matter of claim 1 is therefore new in the sense of Article 33(2) PCT.

The objective-problem underlying claim 1 is to provide a method of producing a catheter with a thin walled tube without having to use a sleeve moving between the mould and the core with great precision.

The combination of features of claim 1 is not disclosed nor suggested by the available prior art documents and claim 1 also meets the requirements of Article 33(3) PCT.

- 2.2 Similar as what brought forward for claim 1 applies correspondingly for the combinations of feaures of independent product claim 11 and apparatus claim 21.